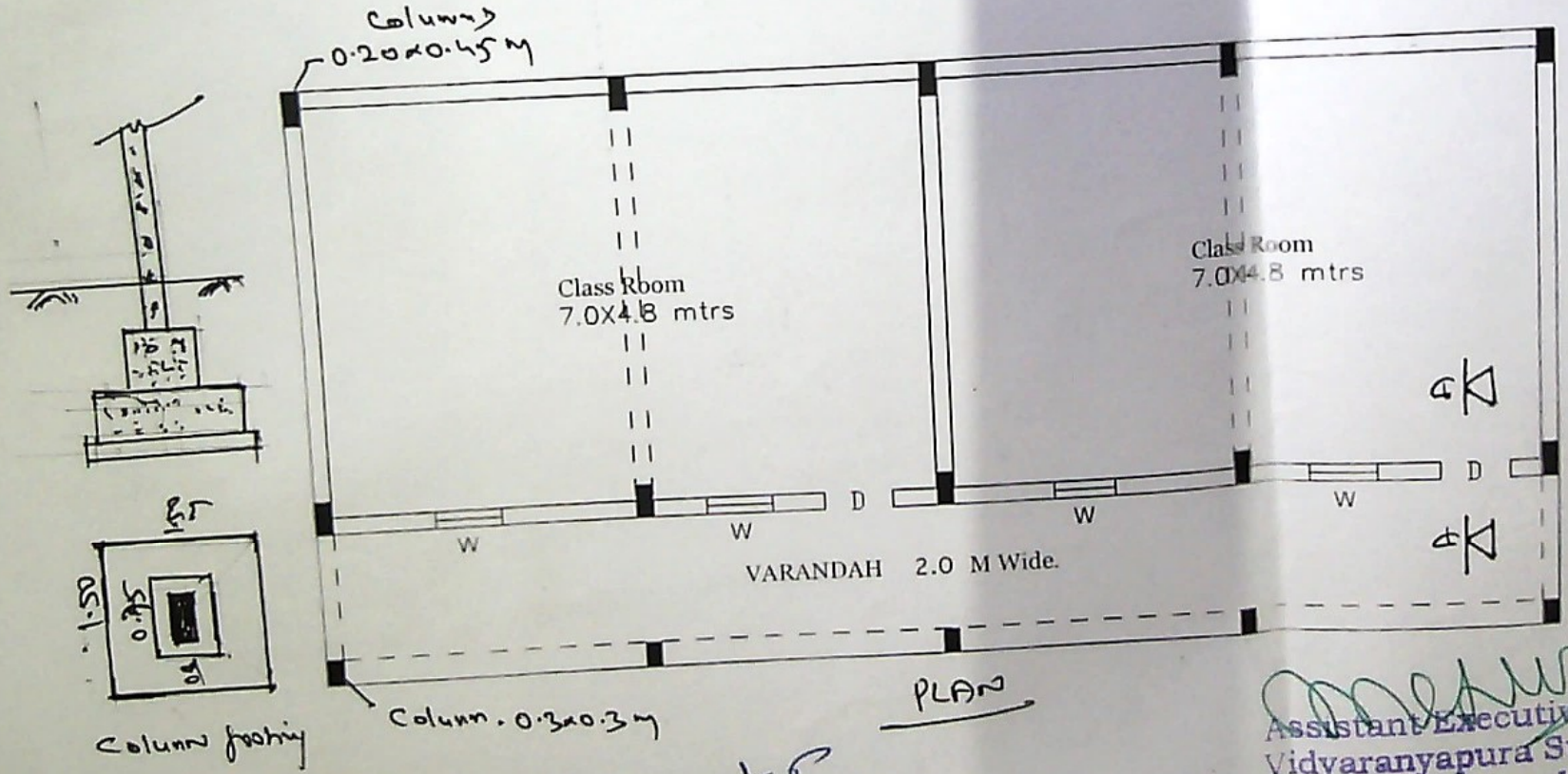
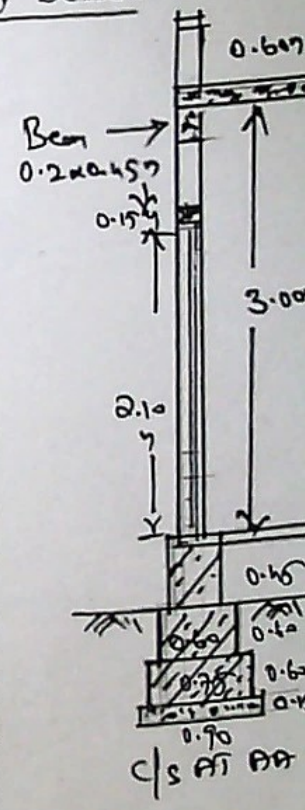
BRUHAT BANG[illegible]

[illegible] ANKA ZONE, BYATARAYANAPURA DIVISION

Name of Work: Construction of Additional Class Rooms Govt.Higher Primery School at Singapura in ward no.11 Kuvempunagara





Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bengalore-97

BRUHAT BANGALORE MAHANAGARA PALIKE

YALAHANKA ZONE

Name of Work: Estimate for Construction of Additional Class Rooms to Govt. Higher Primary School of Singapura in Ward No. 11 (Kuvempunagara) Vidyaranyapura Sub Division.

			Estimate Cost Rs.					2000000.00	
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRB 2-2.1 : Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, **in ordinary soil** not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. specification. No. KBS 2.1(a) / 2.3.5 **Page No. 5 / Item No. 2.3 of PWD SR 2016-17**	Cum							
	Allround Centre Line		1	43.80	1.00	0.90	39.42		
	Front		1	15.00	0.90	0.90	12.15		
			2	1.80	0.90	0.90	2.92		
	Columns		10	1.50	1.50	1.50	33.75		
			5	1.20	1.20	1.20	8.64		
							96.88		
	Deduction of Columns		10	1.50	0.90	0.90	-12.15		
	Basic Rate	189.00					**84.73**	204.12	**17294.00**
	Area Weightage @ 8%	15.12							
	Total	**204.12**							
2	KSRB 4-1.3 : Providing and laying in position **plain cement concrete of mix 1:4:8** with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation**, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. **Page No.12, Item No. 4.3 of PWD SR 2016-17**	Cum							
	Allround Centre Line		1	43.80	0.75	0.15	4.93		
	Front		1	15.00	0.75	0.15	1.69		
			2	1.80	0.75	0.15	0.41		
	Columns		10	1.50	1.50	0.15	3.38		
			5	1.20	1.20	0.15	1.08		
	Flooring Rooms		2	7.00	4.80	0.15	10.08		
	Front		1	14.60	1.80	0.15	3.94		
							25.50		
	Deduction of Columns		10	1.50	0.90	0.15	-2.03		
	Basic Rate	4867.00					**23.47**	5256.36	**123377.00**
	Area Weightage @ 8%	389.36							
	Total	**5256.36**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
3	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in **foundation with cement mortar 1:6, stone** hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 **Page No. 23 / Item No. 5.6, PWD SR 2016-17**	Cum							
	Allround Centre Line		1	43.80	0.75	0.60	19.71		
	Front		1	43.80	0.75	0.60	19.71		
			1	15.00	0.75	0.60	6.75		
			2	1.80	0.75	0.60	1.62		
							47.79		
	Deduction of Columns		12	0.45	0.20	0.60	-0.65		
	Basic Rate	4187.00					**47.14**	4521.96	**213174.00**
	Area Weightage @ 8%	334.96							
	Total	**4521.96**							
4	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in **basement with cement mortar 1:6**, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 **Page No. 23 / Item No. 5.9, PWD SR 2016-17**	Cum							
			1	43.80	0.45	0.45	8.87		
			1	14.80	0.45	0.45	3.00		
			2	1.80	0.45	0.45	0.73		
							12.60		
	Deduction of Columns		10	0.45	0.20	0.45	-0.41		
	Basic Rate	5005.00					**12.19**	5405 40	**65895.00**
	Area Weightage @ 8%	400.40							
	Total	**5405.40**							
5	KSRB 15.1.3 Providing ruled pointing to coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications **Page No. 113 / Item No. 15.3, PWD SR 2016-17**	Sqm							
			1	43.80		0.45	19.71		
			1	14.80		0.45	6.66		
			2	1.80		0.45	1.62		
	Basic Rate	98.00					**27.99**	105.84	**2962.00**
	Area Weightage @ 8%	7.84							
	Total	**105.84**							
6	KSRB 2-4 : **Refilling available earth** around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specifications. **Page No. 5 / Item No. 2.11 of PWD SR 2016-17**	Cum							
			Qty Vide Item No. 1				**84.73**	82.08	**6954.00**
	Basic Rate	76.00							
	Area Weightage @ 8%	6.08							
	Total	**82.08**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
7	KSRB 4-6.1 : Providing and removing **centering, shuttering, strutting, propping** etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specificaitons. Specification No. KBS 4.6.2 Page **No. 15 / Item No. 4.28, PWD SR 2016-17**	Sqm							(12)
	Column		10	6.00		0.60	36.00		
			10	1.30		4.00	52.00		
			5	4.80		0.60	14.40		
			5	1.00		4.00	20.00		
	Plinth		2	43.80		0.30	26.28		
	Lintel		2	43.80		0.15	13.14		
	Beam		2	4.80		1.20	11.52		
			5	1.80		0.90	8.10		
	Alround Beam		2	43.80		0.45	39.42		
	Basic Rate	231.00					**220.86**	249.48	**55100.00**
	Area Weightage @ 8%	18.48							
	Total	**249.48**							
8	KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal**, coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastisiser @ 3lts confirming to IS 9103-1999 reaffirmed-2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, walls (any thickness) including attached plasters, column, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1,4.6, **No. 13 / Item No. 4.11 / PWD SR 2016-17**	Cum							
	Column		10	1.50	1.50	0.60	13.50		
			10	0.45	0.20	4.00	3.60		
			5	1.20	1.20	0.60	4.32		
			5	0.30	0.30	4.00	1.80		
	Plinth		1	43.80	0.20	0.30	2.63		
	Lintel		1	43.80	0.20	0.15	1.31		
	Beam		2	4.80	0.30	0.45	1.30		
	Front Beam		1	14.60	0.30	0.30	1.31		
			5	1.80	0.30	0.30	0.81		
	Tie Beam		1	43.80	0.20	0.45	3.94		
	Roof Slab		1	14.60	7.00	0.15	15.33		
	Stair case								
	Footing		1	1.50	1.50	0.45	1.01		
	First Flight		1	3.30	1.50	0.15	0.74		
	Landing		1	3.00	2.00	0.15	0.90		
	Second Flight		1	3.30	1.50	0.15	0.74		
	Steps		20x1/2	1.50	0.30	0.15	0.68		
	Basic Rate	6011.00					**53.93**	6491.88	**350084.00**
	Area Weightage @ 8%	480.88							
	Total	**6491.88**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
9	KSRB 4.9.2: Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **TMT Bars FE 500 Page No. 17 / Item No. 4.46.2 / PWD SR 2015-16**	Tonne								
	115 Kgs/ Cum		0.115	53.93			6.20		
	Basic Rate	56050.00					**6.20**	60534.00	**375404.00**
	Area Weightage @ 8%	4484.00							
	Total	**60534.00**							
10	KSRB 4-6.2 : Providing and removing centering, shuttering, strutting, propping etc., and **removal of form work for flat surface such as suspended floors, roofs, landings, balconies and likes, thickness upto 200 mm** including cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 **Page No. 15 / Item No. 4.18 / PWD SR 2016-17**	Sqm							
	Roof Rooms 1		2	7.00	4.80		67.20		
	Front 1		1	14.20	1.80		25.56		
	Front 1		1	10.21	2.50		25.53		
	Room Beams		4	4.80	0.91		17.47		
			3	6.00	0.91		16.38		
	Front Beams		2	14.60	0.76		22.19		
			4	1.80	0.76		5.47		
	Plinth		2	43.80		0.30	26.28		
	Lintel		2	43.80		0.15	13.14		
			2	43.80		0.30	26.28		
	Roof Sides		2	14.60		0.15	4.38		
			2	7.00		0.15	2.10		
	Staircase		4	1.50		0.45	2.70		
	First and Second Flight		2	3.30		1.50	9.90		
	landing		1	3.00		2.00	6.00		
	Basic Rate	313.00					**270.58**	331.78	**89773.00**
	Area Weightage @ 6%	18.78							
	Total	**331.78**							
11	KSRB 5-14 : Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4 **Page No. 25 / Item No. 5.26.2, PWD SR 2016-17**	Sqm							
	Long Wall		2	14.60		3.00	87.60		
	Short Wall		3	4.80		3.00	43.20		
	Parapet Wall		2	14.60		0.45	13.14		
			2	6.60		0.45	5.94		
	Stage		2	2.50		0.25	1.25		
							151.13		

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Deduct for Openings Door		2	1.20		2.10	5.04		
	Windows		4	1.50		1.35	8.10		
	Lintel		1	43.80		0.15	6.57		
	Tie Beam		1	43.80		0.45	19.71		
							-39.42		
	Basic Rate	907.00					111.71	979.56	109427.00
	Area Weightage @ 8%	72.56							
	Total	979.56							
12	KSRB 10-3 : Providing and laying integral cement based waterproofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc., consisting of following application. (a) Applying and grouting a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with proprietary water proofing compound conforming to IS:2645 over the RCC slab after cleaning the surface before treatment. (b) Laying cement concrete using broken brick bats 25mm to 100mm size with 50% of cement mortar 1:5 admixed with proprietary water proofing compound conforming IS:2645 over 20mm thick layer of cement mortar 1:5 admixed with proprietary water proofing compound to required slope and treating similarly the adjoining walls upto 300mm height including rounding off junctions of walls and slabs. (c) After two days of proper curing, applying a second coat of cement lurry admixed with proprietary water proofing compound (d) Finishing the surface with 20mm thick jointless cement mortar of mix 1:4 admixed with proprietary water proofing compound and finally	Sqm								
			1	14.60	7.00		102.20		
	Basic Rate	904.00					102.20	976.32	99780.00
	Area Weightage @ 8%	72.32							
	Total	976.32							
13	KSRB15-3-13 : Providing 12mm thick cement plaster in single coat with cement mortar 1:3, to ceiling including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. **Page No. 114, Item No. 15.21 of PWD SR 2016-17**	Sqm								
	Rooms		2	7.00	4.80		67.20		
	Beams		4	4.80	0.45		8.64		
	Front Beams		8	1.80	0.30		4.32		
			1	14.20	0.30		4.26		
	Basic Rate	193.00					84.42	208.44	17597.00
	Area Weightage @ 8%	15.44							
	Total	208.44							
14	KSRB15-3.8 : Providing 18mm thick cement plaster in single coat with cement mortar 1:4, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. **Page No. 114 / Item No. 15.16, PWD SR 2016-17 (Inside Wall)**	Sqm								

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Rooms		4	4.80	3.00		57.60		
			4	7.00	3.00		84.00		
	Front		1	14.60	3.00		43.80		
	Staircase		1	3.00	3.00		9.00		
	Below Staircase		2	3.30	1.50		9.90		
	Landing		1	3.00	2.00		6.00		
							210.30		
	Deductions - For door Doors		2	1.20		2.10	5.04		
	Windows		4	1.50		1.20	7.20		
							-12.24		
							198.06	238.68	**47273.00**
	Basic Rate	221.00							
	Area Weightage @ 8%	17.68							
	Total	**238.68**							
15	KSRB15-7 : Providing lime rendering for plastering to wall and ceiling, including cost of materials, labour, curing complete as per specifications. **Page No. 115, Item No. 15.33, PWD SR 2016-17**	Sqm							
			Qty Vide Item No. 9+10				**282.48**	27.00	**7627.00**
	Basic Rate	25.00							
	Area Weightage @ 8%	2.00							
	Total	**27.00**							
16	Providing wall black boards in CM 1:3 with two coats of black paint including finishing etc., complete. **Page No. 264, Item No. 37.30, PWD SR 2016-17**	Sqm							
			2	2.60	1.32		**6.86**	992.52	**6813.00**
	Basic Rate	919.00							
	Area Weightage @ 8%	73.52							
	Total	**992.52**							
17	KSRB15-3.9 :Providing 18mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. **Page No. 114 / Item No. 15.17, PWD SR 2016-17 (Outside Wall)**	Sqm							
	Out Side		1	14.60		4.13	60.30		
			2	5.20		4.13	42.95		
	Stair case		1	3.00		4.13	12.39		
	Basic Rate	198.00					**115.64**	213.84	**24728.00**
	Area Weightage @ 8%	15.84							
	Total	**213.84**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
18	Supplying and fixing pressed steel door frames size 125x65 mm manufactured from 1.25mm thick carbon steel or imported steel strips with mitred joints of 900 for door openings and shutters made out of seasoned Honne wood, styles of 30 mm, thick with lock rail of 160 mm, width, top and side rails of 100 mm. width and bottom rails of 250 mm width and panel filling with 12mm thick particle board of exterior grade bonded with phenol formal dehide resin and the shutter shall be rot proof, vermin proof, heat resistant guaranteed against shrinkage, warpage and such other defects for a period of 3 years. This shall be as per approved drawings, specification and direction including cost of conveyance, manufacturing, painting with enamel paint 2 coats over primer coat, cost of labour for all items of work, machinery, equipment and all other incidental charges with all lead, lift, loading and unloading etc., complete. The Hollow portion of the frame to be filled with cement concrete 1:2:4. **Page No. 39 / Item No. 7.26, PWD SR 2016-17**	Sqm							
			3	1.20		2.10	7.56		
	Basic Rate	3500.00					**7.56**	3780.00	**28577.00**
	Area Weightage @ 8%	280.00							
	Total	**3780.00**							
19	"Supplying and fixing pressed steel window frame of size 100 x 50mm manufactured from 1.25 mm thick carbon steel or imported steel strips with neat mitred joints at 900degree for window openings and shall be suitable to fix M.S. grills as per design and drawings using 12mm dia rods at 100mm Centre to Centre horizontally and two members of M.S flats of 6mmx40mm size at 150mm apart, welded into a frame of 6mmx40mm size M.S. flats with 16mm size lugs, and 8 Nos. of 100mm size hinges, 4 Nos of Butt Stay pins and 4 Nos. Tower bolts and shutters half panelled and hallf glazed with shutters made out of seasoned honne wood, styles of 30mm thick and 100mm width and rails of 30mm thick and 100mm width and using 4mm thick pin headed glass and panel, filling with 12mm thick particle board of exterior grade bonded with phenol formal dehide resin and the shutter shall be rot proof vermin proof, heat resistant guaranteed against shrinkage, warp age and such other defects for a period of 3 years.This shall be as per approved drawing, specification and direction including cost of	Sqm							
	For New School Rooms Windows		4	1.50		1.35	8.10		
	For Existing School Rooms		2	1.00		1.20	2.40		
	Basic Rate	3800.00					**10.50**	4104.00	**43092.00**
	Area Weightage @ 8%	304.00							
	Total	**4104.00**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
20	KSRB 14.10-1: Flooring with 25mm to 40mm thick polished **tandur blue stone slabs** using cement mortar 1:6, 25mm thick over existing cement concrete bed or top of roof laid to line and level and jointed with cement slurry mixed with pigment to match the shade of the slab, , including cost of materials, labour, curing, polishing complete as per specifications. Specification No. KBS **Page No. 103 / Item No. 14.15, PWD SR 2016-17**	Sqm							
	Rooms		2	7.00	4.80		67.20		
	Skerting		4	7.00	0.10		2.80		
			4	4.80	0.10		1.92		
	Front		1	14.60	1.80		26.28		
	Skerting		1	14.60	0.10		1.46		
	For Ground Floor For Steps		20	1.50	0.15		4.50		
			20	1.50	0.15		4.50		
	Landing		1	3.00	2.00		6.00		
	For Existing Class Rooms		2	6.00	4.50		54.00		
	Skirting		4	6.00	0.10		2.40		
			4	4.50	0.10		1.80		
	Basic Rate	1121.00					**172.86**	1210.68	**209278.00**
	Area Weightage @ 8%	89.68							
	Total	**1210.68**							
21	KSRB 15-14.1 : Providing and **applying two coats with oil bound washable distemper** of approved brand and shade on wall surface including priming coat with distemper primer after throughly brooming the surface free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications. **Page No. 117 / Item No. 15.49.1, PWD SR 2016-17**	Sqm							
			Qty Vide Item No.9+10				282.48		
	Inside Paint to Existing Room		4	6.00		3.00	72.00		
			4	4.50		3.00	54.00		
							408.48		
	Deduction for Windows		2x0.5	0.60		1.20	0.72		
			2x0.5	1.20		2.10	2.52		
							-3.24		
	Basic Rate	71.00					**405.24**	76.68	**31074.00**
	Area Weightage @ 8%	5.68							
	Total	**76.68**							
2	KSRB 15-16.1 : Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to give an even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications. - with primer. **Page No. 117 / Item No. 15.53.2, SR 2016-17.**	Sqm							
			Qty Vide Item No.12				115.64		
	Inside Paint to Existing Room		2	5.00		4.00	40.00		
			2	12.70		4.00	101.60		
							257.24		
	Deduction for Windows		2x0.5	0.60		1.20	0.72		
			2x0.5	1.20		2.10	2.52		
							-3.24		

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	84.00					254.00	90.72	23043.00
	Area Weightage @ 8%	6.72							
	Total	90.72							
23	KSRB 8.6-7 : Providing and fixing on wall surface 4.0 kg / sq.cm H.D.P.E. rain down water pipes 90 mm outer dia. approved make and brand with necessary specials like shoes, bends and offsets fixed with iron clamps, wall plugs, screws, including cost of materials, labour, complete as per specifications. **Page No. 47 / Item No. 8.18, PWD SR 2016-17**	m							
	Landing		4	3.00			12.00		
	Basic Rate	428.00					12.00	462.24	5547.00
	Area Weightage @ 8%	34.24							
	Total	462.24							
24	KSRB 8.3-1 : Providing and laying to required line and slope roofing with corrugated asbestos cement sheet 6mm. thick fixed with galvanised iron J or L hooks, bolts and nuts 8mm. dia C.I plain and bitumen washers over the existing purlins, rafters and trusses including cost of materials, labour, complete as per specifications. Specification No. KBS 8.5 **Page No. 46, Item No. 8.3 PWD SR 2016-17**	Sqm							
	Roof Sheet		1	13.00	5.00		65.00		
							65.00	390.96	25412.00
	Basic Rate	362.00							
	Area Weightage @ 8%	28.96							
	Total	390.96							
	Sub Total								1979285.00
	Third Party Inspection Charges @ 1%								19793.00
	Add for unforseen and rounding off								922.00
								Total	2000000.00

Rupees Twenty Lakh(s) Only

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2016-17.
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

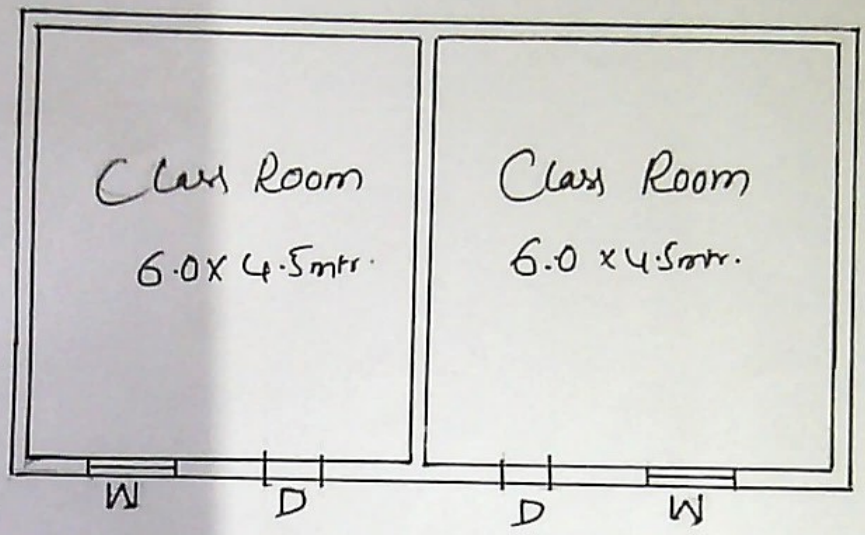
Assistant Engineer
Ward No. 11

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

Executive Engineer 20/01
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

Administrative Approval
Accorded For Rs Twenty lakhs only
Head of A/C P-3075
CER NO :TS/...../17-18 Dt:..

TECHNICAL SANCTION
Accorded For Rs. Twenty lakhs only
Head of A/c P-3075
Div. Ref. No. 51/17-18 Date 20/01/18



INDEX

D = DOOR - 1.2 x 2.1mtr

W = Window - 0.6 x 1.2m.

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

23/07